COLORADO
ROAD TRIP
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Uncompahgre Field Office

History in the Making:

Yesterday's Miners Leave a Treasure for Tomorrow's Visitors

By Denise I. Adamic and Julie Coleman

As we enjoy a nascent summer stroll along the shores of the San Miguel and Dolores Rivers in Western Colorado, we pause to look up at the sun-baked cinnamon cliffs looming high overhead. Our eyes carefully trace the twists and turns of the canyon walls, and there, in the midst of the weathered sandstone, we see an antique, wooden structure, jutting from the rock hundreds of feet above the canyon floor.

Upon first glance, we might think the aged, craggy structure is merely a dilapidated pipeline. However, as we study it further, we realize that we've come across a truly magnificent part of Colorado history. This 1891 gem is none other than the century-old Hanging Flume, which in July, was named to the 2006 World Monument Watch list of 100 Most Endangered Sites.

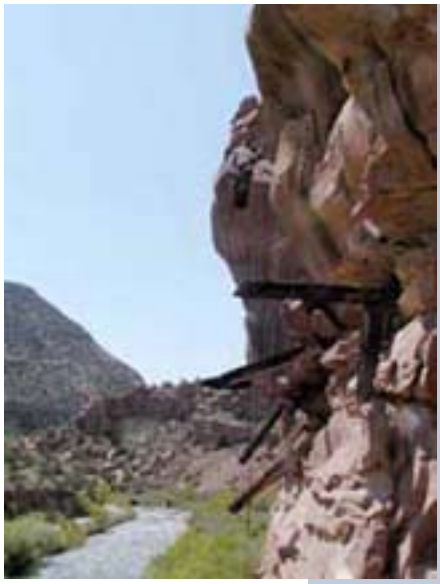
This unique piece of the past is all that remains from the days of hydraulic gold mining in the area, making it the focus of a combined effort to preserve and catalog Colorado's rich mining history.

SAN MIGUEL RIVER, CIRCA 1891

During Colorado's gold rush, hydraulic mining was used to mine placer deposits (areas of sand and gravel that contained gold particles). Water was carried from its source to mining sites by canals. It was then forced through a hose which was big on one end and smaller on the other end causing the water to be forced out at high pressure. This high pressure created a jet that cut into the hillside, washing water and debris into a sluice box that filtered the gold from the dirt and rocks. The Hanging Flume was part of the water way for hydraulic mining in Montrose County.

"This form of mining illustrates the ingenuity and fortitude of the miners' intent on extracting gold from the land," said Julie Coleman, a field archeologist for the Bureau of Land Management's (BLM) Uncompahgre Field Office.

The flume is 12 miles northwest of the town of Naturita just off highway 141 and begins in the former town of Uravan. It is the most intact of the remaining flumes in Colorado, and is presumed to be the last remaining flume built specifically for hydraulic mining. It is the longest on record in Colorado and over seven miles of the original 13 ½ mile long flume still exist.


SAN MIGUEL RIVER

"No hanging flumes have been preserved for public education or appreciation," said Coleman. "This flume presents a unique opportunity to tell future generations about the colorful history of hydraulic mining in Colorado."

Realizing the importance of this find, the Uncompahgre Field Office placed the flume on the National Register of Historic Places in 1979. In 1999, it was listed as one of Colorado's Most Endangered Places by Colorado Preservation, Inc.

With this designation came an idea to preserve and interpret the Hanging Flume in order to provide Heritage Tourism (experiencing places, artifacts, and activities that authentically represent the stories and people of the past and present). After months of planning, a project to preserve the Hanging Flume began in the spring of 2003.


VERTICAL ACCESS

The team that formed to plan and implement the restoration of the Hanging Flume included Michelle Murphy, of the Western Colorado Interpretive Assoc., Patricia Holcomb, of Colorado Preservation Inc., Julie Coleman of the BLM, Jon Schler, from the Colorado Center for Community Development, Jon Horn and Jack Pfertsh, from Alpine Archaeological Consultants, Kent Diebolt, from Vertical Access Inc., Justin Spivey of Robert Silman Associates P.C., Jill Seyfarth, from Cultural Resource Planning, Ron Anthony of Anthony and Associates P.C., Jon Held from the State Historical Fund, and Jerald Reid, a volunteer historian.

"The collaborative team effort has really made it possible to undertake such an amazing preservation project," said Coleman.


WHAT REMAINS OF THE FLUME

Funding for the restoration project came from a variety of sources including the Colorado State Historical Fund, the BLM, the National Trust for Historic Preservation, San Miguel County, the Bacon Family Foundation, and John Hendricks – the owner of the Discovery Channel.

With the funding in place, work to understand and preserve the flume began.

Much of the research was done high above the canyon floor. Information about the construction techniques used to build the flume was collected by researchers who

rappelled down the face of the cliffs to the level of the wooden structure. Members of Alpine Archaeological Consultants worked with Vertical Access, a professional "preservation" climbing team from New York City, and the engineering firm of Robert Silman Associates, also from New York.

VERTICAL ACCESS

"The project's documentation was challenging, yet fun," said Coleman.

Aside from the Hanging Flume, twenty-three additional sites were discovered as part of the construction landscape. These included two construction camps, two blacksmith forges, a rock shelter used to construct the flume, a home site and grave, the workings of a placer claim, and 16 prospectors' trails.

"The other findings really contribute to the wonder of this area," said Coleman. "These extra finds add the human element to this discovery – it helps show visitors today how workers lived during the construction of the flume."

The information obtained through this research is currently being incorporated into a master plan which will outline future stabilization and interpretation of the flume. The Uncompahgre Field Office also plans to use the data to work with the Unaweep-Tabeguache Scenic Byway in order to promote Heritage Tourism opportunities in the Montrose area.

Currently, the team working on the Hanging Flume project is putting together applications for further funding. This funding will be used to conduct interpretation and stabilization of the flume.

"The team has recently submitted a grant to the State Historical Fund for the interpretation of the flume to enable everyone to fully understand and enjoy it," said Coleman.

Thanks to the combined efforts of so many future-focused individuals, the rich story that yesterday's miners left behind, is being preserved for future generations to explore now, and on future roadtrips among the red, crumbling cliffs in Western Colorado.

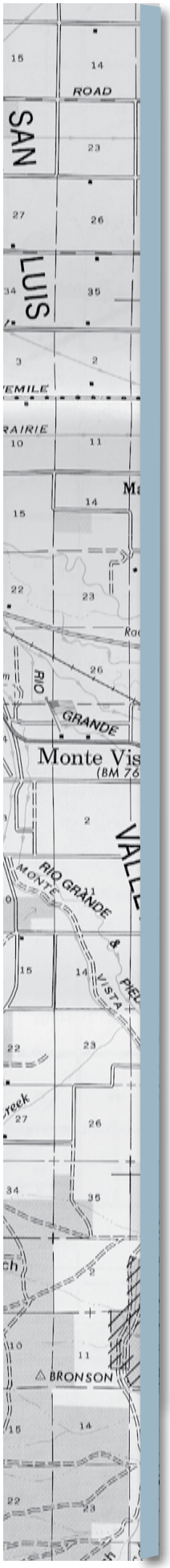
For further information regarding the Hanging Flume project, please contact Julie Coleman at BLM's Uncompahgre Field Office at 970-240-5300.

Mining on Federal Lands – A Rich Past

By Alexa Bainbridge

Coal mining on federal lands is an important part of our nation's history and future. The Bureau of Land Management's (BLM) Uncompahgre Field Office (UFO) in Montrose, Colorado, has been entrusted by the people of the United States to manage federal lands where coal is found. Currently, the UFO is responsible for managing federal coal resources within the boundaries of the UFO, and for the inspection and enforcement of federal coal lease operations in areas managed by BLM's Grand Junction Field Office (GFO) and San Juan Public Lands Center (SJPLC).

Federal agencies first gained management authority of coal resources in the western United States through the Act to Provide Sale of Lands Containing Coal in 1873. At that time, the maximum acreage sold as a single parcel was 160 acres. This provided



enough coal resource to the nation for many years of production for what was at the time a large mining operation. However, there were a myriad of small parcels sold, which allowed owners to extract coal for domestic use, especially in rural areas. This practice began to raise concerns about fragmenting both the coal and land resources between many owners.

COAL EXPLORATION RIG

Although the Act of 1873 was not replaced until the Mineral Leasing Act of 1920, which is the current authority for federal coal leasing, President Theodore Roosevelt issued an executive order in 1906. This action withdrew a great deal of all lands containing coal from sale in order to conserve those lands and to prevent the fragmentation of the mineral resources. Then in 1910, and again in 1912, congress provided more authority for coal withdrawals that would be based on reserve studies conducted by the United States Geological Survey (USGS). Property given or sold to private citizens from that time on provided for the reservation of coal and other minerals to the federal government.

The Act of 1920 insured perpetual federal management of coal resources. The Act directed the USGS to conduct coal evaluation and to inspect lease properties and related mining operations, while the General Land Office (GLO) issued and administered the lease agreements. In 1946, the BLM assumed the responsibility of the GLO, and in 1983, the BLM also assumed the responsibility of the USGS. In 1982, the Minerals Management Service (MMS) was created to manage all mineral royalty payments, including those related to coal leases.

There are three coal mining operations within the boundaries managed by the UFO, all located in the geographic area called the North Fork (NF) of the Gunnison River near the town of Paonia, Colorado. The combined yearly coal production from these mines ranges from 15 to 18 million tons per year. The revenue stream created by coal mining goes to the federal treasury as royalties, bonus and lease rental payments, and totals about $20 million per year. The federal coal operations located in the boundaries managed by the SJPLC and GFO are less, with a combined yearly coal production of about 750,000 tons and a revenue stream of about $1 million.

NORTH FORK VALLEY

Coal was originally discovered along the NF in the late 1880's, and underground coal mining has existed continuously in this area over the past 115 years. Commercial coal mining on a large scale in the region began near Somerset, Colorado in 1903. The Denver and Rio Grande Western Railroad constructed a railroad to service this mine and the area around Somerset became one of Colorado's most important coal producing regions on the western slope. The NF coal production from 1995 to now has surpassed all previous production prior to 1995 due to an increase in demand for coal and improved technology.

Coal has many industrial uses and, through electrical generation, also benefits residential users. More than 90 percent of the NF coal is shipped to electric utilities all over the United States and is an excellent source of low-sulphur coal. This low-sulphur coal is a valuable resource for these utility companies because it complies with the Clean Air Act when burned.

Half of the royalties from the UFO coal mining program come back to Colorado, with the majority of the money going to local schools. Coal mining also helps the local economy by providing jobs in the area.

BOWIE SURF COAL MINING FACILITY

For more information on BLM's coal mining program contact Desty Dyer, Mining Engineer, at the Uncompahgre Field Office at 970-240-5302.